

REMARKS

The undersigned thanks Examiners Smith and Gutierrez for the courtesies extended during the interview held on March 26, 2003.

The focus of the discussions during the interview were with respect to pending claims 1 and 2, which, unlike claims 3-11, do not recite the measuring lines and digits or any particular radius of curvature for the central section or the different configuration of the end sections. During the course of the interview, Examiner Gutierrez indicated that the Applicant's position seemed persuasive and requested that additional Remarks be submitted to highlight the statements made during the interview. It is respectfully requested that the Examiner carefully consider both the remarks submitted in the Amendment of February 28, 2003, which has not yet been acted upon, as well as the foregoing. In effect, the foregoing is a continuation of the remarks previously submitted, not a substitute therefor.

As discussed during the interview, a primary focus of the claims currently pending in this application are directed toward the improved readability and resulting improved functionality of the tape rule of the present invention in comparison with prior art configurations. In stark contrast, as will be discussed below, the prior art applied by the Examiner is concerned with detracting from the readability of the indicia on the blade when a high blade height dimension is provided. Thus, the applied references actually teach away from the claimed invention rather than render it obvious.

As discussed in the present specification:

"It can be understood by one skilled in the art that the 1.25 inch blade width of a preferred embodiment of the assembly 10 allows the blade height H to be increased without increasing the overall blade curvature to a degree that would make reading the gradations and lettering printed on the concave surface of the blade 16 difficult. This construction results in a blade with relatively high height H that is also easy to read. (In contrast, one inch blades having a curve height of the extended blade of over 0.21 become very difficult to read and are thus not commercially practical). Increasing the blade width of the blade of the present invention also allows the printing on the blade to be made larger, thus making measurements easier by making the blade easier to read." (Specification page 10, lines 12 - 21).

The criticality of pending claims 1 and 2 lies in the claimed combination of the blade height range together with the blade width range in the context of a concavo-convex steel blade. This combination is not fairly taught or suggested by the prior art of record. As noted above, in accordance with the present invention, blade height is increased without increasing the overall blade curvature to a degree that would make reading the gradations and lettering printed on the concave surface of the blade difficult. In addition, the relatively large width permits larger printing on the concave side of the blade, thus making the blade easier to read.

The prior art of record fails to appreciate the synergistic result that is brought about by the claimed invention which results in the combined effect of improved readability in the context of a tape rule blade that also has characteristics of improved standout. That is, the width and height of a concavo-convex metal blade are two important factors that not only impact

readability as discussed above, but also influence blade standout. As a result, utilizing the unique combination of height and width dimensions claimed has brought about a synergistic result that enables the user to take measurements from greater distances along various positions along the length of the blade. This is beneficial in instances where measurements are to be taken in areas that are difficult to access. For example, if a contractor is taking a measurement between two remote locations in an unfinished attic, the contractor may wish to take a reading between the position of the blade hook and an intermediate portion of the blade which is spaced a significant distance from where the contractor is positioned. The synergistic benefits of improved readability in combination with improved standout, as influenced by the combined height and width dimensions as claimed, benefits this synergistic functionality in a manner that has not previously been contemplated.

It must also be appreciated that neither the claimed height or width dimensions alone would achieve this result. Specifically, employing the claimed width range together with a conventional height range for a concavo-convex metal blade would result in a very poor standout. As a result, any improvement in readability will be of little benefit. On the other hand, employing the claimed height range together with a conventional width range for a concavo-convex metal blade would result in very poor readability. It is only the novel combination of the height and width ranges for a concavo-convex steel blade as claimed that brings about the synergistic result of enabling remote measurements to be taken from a greater distance.

In contrast, rather than providing any suggestion or motivation to pursue the claimed combination of ranges, both the Rutty and Nagasawa references tend to establish the Applicant's point that the tape measure industry shied away from the claimed height range due to concerns associated with, among other things, readability of the indicia on the blade. Specifically, while it has been known that the degree of curvature will influence standout length for a rule of particular width and thickness, providing too great of a height dimension was perceived to cause problems associated with readability of the indicia on the tape rule, as well as other difficulties. For example, in the Background of the Invention, Rutty states that in the context of a concavo-convex cross section blade, "the indicia which are imprinted thereon become more difficult to read when the arcuate cross section becomes steeper." (COL. 1, lines 50-52). Similarly, Nagasawa expressly acknowledges that where the length of the arc in cross section  $m$  is more than three-fourths of the circumferential length  $L$  of the circle described by the arc of the blade, the "graduation is hard to read." In fact, Nagasawa even contemplates that it may be desirable to provide the graduation "on the outer surface besides the inner surface of the measure matrix." (COL. 3, lines 57- COL. 4, line 8).

Besides problems associated with readability, the prior art of record also recognizes additional structural problems associated with increasing the blade height. Specifically, Rutty notes that "[i]t has been necessary to balance the advantages to be gained by increasing the depth of curvature of the blade for increase length of blade standout with the power requirements for the spring to effect retraction and also with the life characteristics resulting from repeated deflection into the flattened condition when the blade is coiled." In fact, Rutty states that "[a]lthough the increased depth of cross section in the outer terminal section illustrated in one of

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the embodiments will have the effect of increasing the frictional resistance to retraction and thus augment braking action, it will be appreciated that it also increases the power requirement for retracting the extended blade if the length extended comprises only such terminal section. Thus, some manual assistance may be necessary to augment the spring force. To some extent, this problem may be reduced by employing friction reducing rollers inside the case adjacent the exit aperture and by using a low friction synthetic resin insert to define the exit aperture as shown in the illustrated embodiment."(COL. 7, lines 1-13). Moreover, the Background of Ruttly further states that "when there is a very high cross curve or deep cross section, there is a stress point at the point where the blade does buckle when fully extended, which, over repeated usage, may cause a stress fracture." (COL. 1, lines 41-56). Finally, Nagasawa also recognizes that if  $m$  is more than three-fourths of  $L$ , "then the measure matrix cannot be flattened and wound around a reel.. ." (COL. 4, lines 1-2).

In sum, the very prior art cited by the Examiner not only fails to teach or suggest the combination of particular height and width ranges noted above, it specifically discusses several problems associated with increased depth of curvature: i.e., problems associated with readability, increased spring force requirements, increased stress on the blade when it buckles, and difficulties and life characteristic issues associated with deflecting the blade into the flattened condition.

It has been established that prior art references must be read as a whole, and the above cited passages must be taken into account in making an obviousness determination, E.g., In re Kotzab, 217 F.3d 1365, 1371 (Fed. Cir. 2000). The problems discussed in the above passages

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would discourage one skilled in the art from employing the depth of curvature range as presently claimed.

It should be noted that, unlike claim 18 of parent Patent No. 6,324,769, the presently pending claims are not limited to a particular blade thickness. However, independent claim 1 is instead limited to a blade having a narrower range on both the width and height dimension. It also must be reiterated that the claims are further limited to a concavo-convex blade of the specified height and width dimension. Other prior art attempts to improve standout have had a significantly adverse affect on blade readability. For example, U.S. Patent No. 4,352,244 to Tomuro cited to PTO on February 20, 2002 teaches a blade that has a width of 30 to 50 mm (i.e., 1.18" to 1.96"), but utilizes a rolled portion to improve standout. This has a detrimental affect on readability because the rolled portion significantly reduces the printable area on the upper side of the blade. It should also be noted that the Gindas advertisement also submitted to the PTO on February 20, 2002 discloses a steel blade width to 32mm (1.26"), but is completely silent on whether a concavo-convex blade is provided and is thus cumulative with the teachings of Tomuro.

Moreover, even assuming *arguendo* that the Gindas advertisement can be construed as teaching the claimed width dimension in the context of a concavo-convex blade, it is clearly lacking any teaching whatsoever regarding the height dimension. And, as mentioned above, it is only the height dimension in combination with the width dimension of a concavo-convex blade as claimed that will bring about the improved functionality of the invention.

The Examiner has acknowledged that the prior art references of record clearly do not anticipate the claims that were originally presented, and are now even further removed from the claims as amended. It is submitted that not only do the prior art references fail to render the claimed invention obvious, but they actually help to prove the non-obviousness of the claimed invention. Specifically, irrespective of the fact that tape rules have been available for over 70 years, none of the prior art teaches or suggests to provide a metal, concavo-convex tape rule blade with the dimensions specifically claimed. Rather, if anything, the reference of record teach away from the claimed invention and tend to establish reasons why those skilled in the art of tape rule manufacture would avoid the dimensions claimed.

The skepticism in the industry regarding the claimed blade dimensions is highly probative of non-obviousness. See Monarch Knitting Machinery v. Sulzer Morat GMBH, 139 F.3d 877, 885 (Fed. Cir. 1998)("A prior art reference may be considered to teach away when "a person of ordinary skill, upon reading the reference would be discouraged from following the path direction divergent from the path that was taken by the applicant . . . . General skepticism of those in the art - not amounting to teaching away - is also 'relevant and persuasive evidence' of nonobviousness . . . . In effect, 'teaching away' is a more pointed and probative form of skepticism expressed in the prior art. In any case, the presence of either of these indicia gives insight into the question of obviousness."). In fact, evidence of secondary considerations such as commercial success, skepticism by others, prior art that teaches away, and copying by others is often the most probative evidence of non-obviousness. Arkie Lures, Inc. v. Gene Larew Tackle, Inc., 119 F.3d 953, 957 (Fed. Cir. 1997). In Arkie, the Federal Circuit quoted its earlier decision in Stratoflex, Inc. v. Aeroquip Corp., 719 F.2d 1530, 1538 (Fed. Cir. 1983):

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"Indeed, evidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not. It is to be considered as part of all the evidence, not just when the decisionmaker remains in doubt after reviewing."

While in hindsight it is easy to speculate that the present invention is obvious, it is highly telling that in its 70+ years, no one in the tape rule industry has contemplated or suggested a concavo-convex metal tape rule blade with the combination of dimensions claimed. It is also highly indicative of non-obviousness that the prior art relied upon by the Examiner particularly discusses perceived problems with increasing the depth of curvature. It is submitted that the Applicant has overcome any *prima facie* showing of obviousness and that the present claims are clearly patentable over the prior art of record.

Submitted herewith is an Information Disclosure Statement. The Information Disclosure Statement includes several references cited in a European Search Report that issued recently in the European Counterpart Application to parent Patent No. 6,423,769. Note that all five references were deemed by the Searcher to be of the "A" category as to the claims in that case. Also enclosed are materials presented by one of the Defendants (Alltrade, Inc.) named in the previously mentioned litigation. The materials allegedly relate to a tape measure manufactured by Gindas: Taiwan Measuring Tapes, Co. The Defendants have argued that this tape was on sale and/or in public use prior to the critical date. However, the Applicants have found that the tape measure in question fails to constitute anticipatory prior art for two distinct reasons. First, the blade does not contain the height dimension being claimed. Second, the Applicant firmly believes that the product referred to was never on sale and/or in public use in the United States prior to the critical date. Because the Applicant and counsel in the litigation have determined that



the Gindas tape rule does not constitute prior art in this country, it is submitted that it is unnecessary for the Applicant to present the information provided in the herewith Information Disclosure Statement. Nevertheless, out of an abundance of caution, the information is being provided to preclude any possibility of the Defendants alleging a failure of the Applicant to comply with Rule 56.

With respect to the Gindas tape rule, on two separate instances the Applicant, John Murray, was given the opportunity by the Defendants (Alltrade and Olympia Tools) in the litigation to measure two different Gindas tape rule samples that the Defendants allege to have been on sale and/or in public use in this country prior to the critical date. However, upon inspection, Mr. Murray found that although the samples had a concavo-convex metal blade with a width dimension of about 1.251" neither sample had the required height dimension. Specifically, on July 23, 2002, Alltrade permitted Mr. Murray to inspect a Gindas tape rule sample that purportedly corresponds to the tape rule mentioned in the documentation submitted herewith. Mr. Murray measured that tape rule and found that the sample had a maximum height dimension of .244". Separately, on October 29, 2002, Olympia permitted Mr. Murray to inspect its sample of a Gindas tape rule. Mr. Murray found that the sample had a maximum height dimension of .232".

Moreover, it is submitted that the materials provided by Alltrade and enclosed herewith do not amount to evidence of a firm "offer for sale" in this country as required by Linear Technology Corp. v. Micrel, Inc., 61 USPQ2d 1225 (Fed. Cir. 2001). A copy of that case is provided herewith.

Moreover, Alltrade's alleged possession of the GINDAS tape would not in and of itself constitute invalidating prior art, because the law requires anticipatory prior art to be publicly known or used in the United States before the invention.

As a final matter, the Applicants note that the various informalities in the specification noted in the prior Office Action were not addressed in the Amendment filed February 28, 2003. Thus, those informalities in the specification have been addressed by this Amendment.

An early Notice of Allowance in this application is respectfully requested.

Respectfully submitted,

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